Conference Controller Deployment Guide

BES 5.0/May 2014

1. Introduction

This document outlines the processes for wirelessly deploying the LoopUp Conference Controller for BlackBerry to users' handheld devices centrally via the BlackBerry Enterprise Server (BES). Alternatively, the LoopUp Conference Controller can also be downloaded (OTA) directly by the user from BlackBerry App World, BlackBerry's app store.

2. System Requirements

The following are the minimum system requirements for the LoopUp Conference Controller.

2.1 Device Properties

Model	Models 83xx, 85xx, 89xx, 90xx, 93xx, 95xx, 96xx, 97xx, 98xx, 99xx
Memory	*32 MB or greater*
Handheld System Software Version	*5.0 or greater*
Network Type	GPRS, EDGE, 1XEV, 1xRTT, 3G, 4G, LTE

2.2 Blackberry Enterprise Server Properties

BES Version	BES Version 4.0 or higher for Lotus Domino or Microsoft Exchange or Novell Groupwise

3. BES Configuration

The LoopUp application can be pushed to user's handhelds wirelessly by the BES.

The LoopUp Conference Controller uses the BlackBerry Enterprise Server Mobile Data Service (MDS) as an HTTP and TCP/IP proxy, allowing for easy communication with LoopUp's application and web servers on the Internet. Applications which transport data using the BlackBerry MDS leverage the simplified enterprise connectivity, data encryption and compression, and network-independence which are inherent in the BlackBerry Enterprise Solution.

LoopUp application files need to be saved on one of the Blackberry Enterprise Server administration computers. This can be the server where the BES is already installed or another server which is being used to propagate the BlackBerry handheld software upgrades and other third-party BlackBerry programs to users.

Specific IT and application control policies need to be assigned to users of the LoopUp Conference Controller. These define the specific resources that third-party applications can access on BlackBerry devices within a corporate network. Application control policies should be tied into the software configuration which will be deployed to users and they can also be used to ensure that the LoopUp Conference Controller remains installed on the handhelds.

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3.1 *Pre-requisites*

The settings in the table below are required for the deployment of the LoopUp Conference Controller.

1	Identify the computer to be used to store LoopUp application files for deployment to the BlackBerry devices. Generally, the files are stored on the BES server itself.
2	Verify that the following services are running on the BES Server: [Start\Control Panel\Administrative Tools\Services…] a. BlackBerry Policy Service b. BlackBerry MDS Connection Service
3	Verify connectivity from the BES server to LoopUp servers. a. Open a browser from the BES server and confirm that the URL https://join.loopup.com opens correctly. b. From a command window, verify that 'telnet altair.LoopUp.com:7270 and orion.LoopUp.com:443 execute successfully.

3.2 Enable Mobile Data Service (MDS)

In order for the LoopUp application to work properly, all users must have access to the Internet from their devices either through MDS (BlackBerry Browser) or through BIS (Internet Browser).

3.3 Specify a shared network folder

1	On the computer that will be used to deploy the LoopUp application to users, create the directory structure **\LoopUp** in the same drive of the BES server where the BlackBerry Enterprise Server is installed. For example: C:\LoopUp or F:\LoopUp
2	Ensure that Authenticated Users have "Full Access" on this new **\LoopUp** folder.
3	Share the folder **\LoopUp** and set **Share Name** as LoopUp. To share and obtain the share name right-click on the **\LoopUp** folder, choose **Properties** and then click on the **'Sharing'** tab. Ensure that the **Share Name** in the '**Share Nam**e' field is '**LoopUp**'.
4	In the BlackBerry Administration Service, on the **Servers and components** menu, expand **BlackBerry Solution topology > BlackBerry Domain > Component view.**
5	Click **BlackBerry Administration Service.**
6	Click **Edit component**.
7	In the **BAS software management section**, in the **BlackBerry Administration Service application shared network drive field**, type the path of the shared network folder using the following format: \\<*BlackBerry_Administration_Service_computer_name*>\<*shared_folder*>. The shared network path must be typed in UNC format (for example, \\ComputerName\LoopUp).
8	Click **Save All**

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3.4 Add to the Application Repository

In order to assign the LoopUp software to a Software Configuration, the application must be added to the BES application repository.

1. Ensure that the .zip file provided by LoopUp with the application software is saved onto the Desktop of the PC from which you are running the Blackberry Administration Service web console session.
2. In the BlackBerry Administration Service, on the **BlackBerry solution management menu** at the top, expand **Software > Applications**.
3. Click **Add or update applications**
   In the **Application location** section, click **Browse**. Navigate to the LoopUp Conference Controller zip file on your Desktop.
4. Click **Next**.
5. Click **Publish application**.

The Application Repository builds the required directory structure in the shared software directory (<drive>\LoopUp) and adds index files for software deployment. In the <drive>**\LoopUp** folder on the BES server, you should see the following files and folders:

- Apploader
- Shared
- CallController.alx
- CallController.cod
- CallController.jad

3.5 Define the Application Control Policy

We recommend that the LoopUp Application should remain installed on user devices and that users should not be allowed to remove them from their devices for consistent enterprise-wide performance. This is achieved by defining an application control policy. In this step, the LoopUp Conference Controller is also allowed to open external connections to the LoopUp application servers.

1. In the BlackBerry Administration Service, on the BlackBerry solution management menu, expand Software
> Applications.
2. Click **Manage Applications**
3. Search for the **LoopUp** application
4. In the search results, click on **LoopUp Conference Controller**
5. In the **Application versions** section, click the version of the application listed.
6. Click **Edit application**
7. Click on the **Application control policies** tab
8. Select the **Use custom application control policies** option
9 In the **Required application name** field, type LoopUp
10. In the Settings section, ensure that **Are internal network connections allowed** is set to Allowed
11 In the Settings section, ensure that **Are external network connections allowed** is set to Allowed
12. In the Settings section, ensure that **Are local network connections allowed** is set to Allowed

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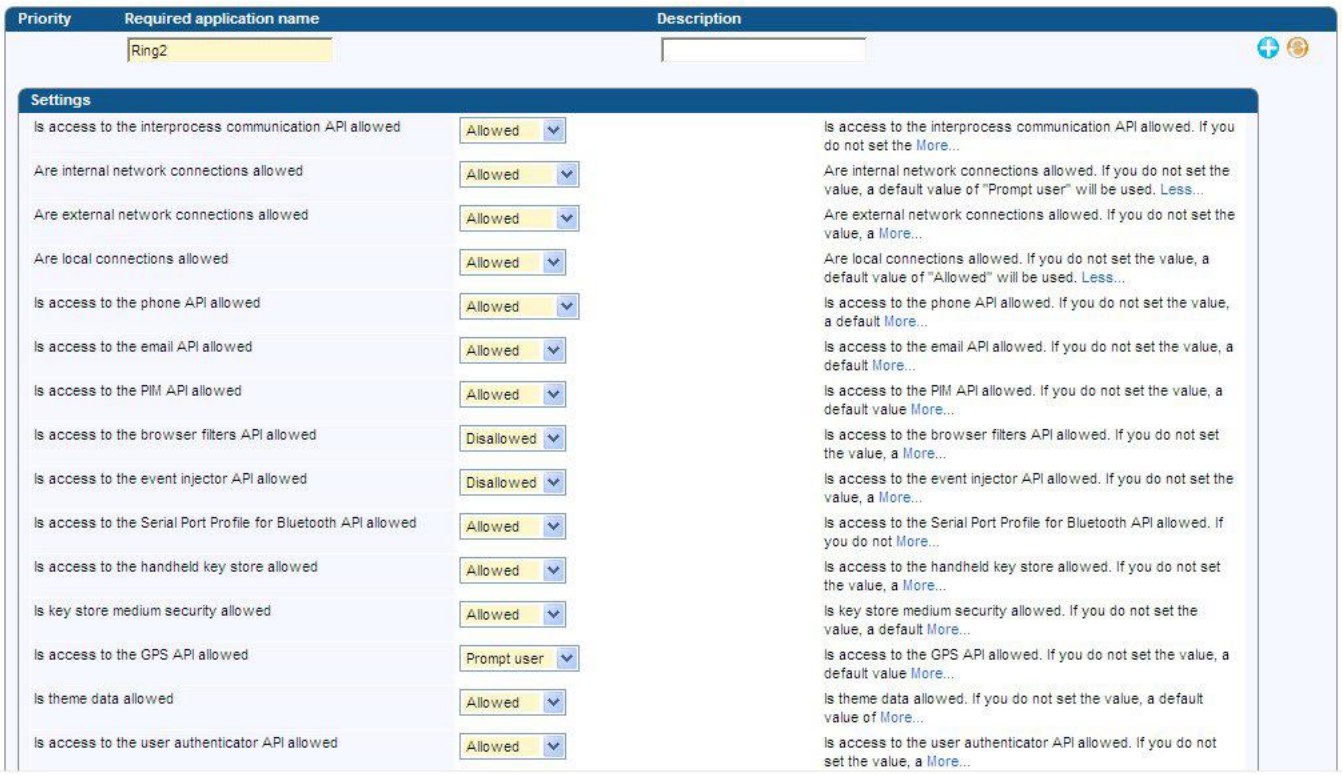
13. In the Settings section, ensure that **Is access to the phone API allowed** is set to Allowed
14. In the Settings section, ensure that **Is access to the email API allowed** is set to Allowed
15. In the Settings section, ensure that **Is access to the PIM API allowed** is set to Allowed
16. In the Settings section, ensure that **Is Access to the Browser Filters API allowed** is set to Allowed
16. Click the **Add** Icon to the right of the Required application name field.
17. Click on Save


Priority
Required application name
Description
Ring2
Settings
Is access to the interprocess communication API allowed
Allowed
Is access to the interprocess communication API allowed. If you do not set the More...
Are internal network connections allowed
Allowed
Are internal network connections allowed. If you do not set the value, a default value of "Prompt user" will be used. Less...
Are external network connections allowed
Allowed
Are external network connections allowed. If you do not set the value, a More...
Are local connections allowed
Allowed
Are local connections allowed. If you do not set the value, a default value of "Allowed" will be used. Less...
Is access to the phone API allowed
Allowed
Is access to the phone API allowed. If you do not set the value, a default More...
Is access to the email API allowed
Allowed
Is access to the email API allowed. If you do not set the value, a default More...
Is access to the PIM API allowed
Allowed
Is access to the PIM API allowed. If you do not set the value, a default value More...
Is access to the browser filters API allowed
Disallowed
Is access to the browser filters API allowed. If you do not set the value, a More...
Is access to the event injector API allowed
Disallowed
Is access to the event injector API allowed. If you do not set the value, a More...
Is access to the Serial Port Profile for Bluetooth API allowed
Allowed
Is access to the Serial Port Profile for Bluetooth API allowed. If you do not More...
Is access to the handheld key store allowed
Allowed
Is access to the handheld key store allowed. If you do not set the value, a More...
Is key store medium security allowed
Allowed
Is key store medium security allowed. If you do not set the value, a default More...
Is access to the GPS API allowed
Prompt user
Is access to the GPS API allowed. If you do not set the value, a default value More...
Is theme data allowed
Allowed
Is theme data allowed. If you do not set the value, a default value of More...
Is access to the user authenticator API allowed
Allowed
Is access to the user authenticator API allowed. If you do not set the value, a More...

3.6 Create a Software Configuration

Once the Software Configuration has been defined, the LoopUp Conference Controller users will need to be assigned to this software configuration as shown in Section 3.8

1. In the BlackBerry® Administration Service, go to the **BlackBerry solution management** menu at the top, expand **Software**.
2. Click **Create a software configuration.**
3. In the **Configuration information** section, in the **Name** field, type **LoopUp**.
4. In the **Disposition for unlisted applications** drop-down list, perform one of the following actions:
   • To permit users to install applications that are not included in the software configuration on their BlackBerry devices, click **Optional**.
   • To prevent users from installing applications that are not included in the software configuration on their BlackBerry devices, click **Disallowed**.

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5. In the **Application control policy for unlisted applications** drop-down list, click the application control policy for unlisted applications that you want to assign to the software configuration. Unless new policies have been created, choose **Standard Unlisted Optional**.
6. Click **Save**

3.7 Add Application to the Software Configuration

1. In the BlackBerry Administration Service, go to the **BlackBerry solution management** menu, expand **Software**.
2. Click **Manage software configurations**.
3. Click software configuration **LoopUp.**
4. Click **Edit software configuration.**
5. On the **Applications** tab, click **Add applications to software configuration.**
6. Search for **LoopUp.**
7. In the search results, select **LoopUp.**
8. In the **Disposition** drop-down list for LoopUp, perform the following action:
• To install the LoopUp application automatically on BlackBerry devices, and to prevent users from removing the application, click **Required**.
9. In the **Application data** section, in the **Application control policy** drop-down list, choose the previously created **LoopUp** application control policy.
10. In the **Deployment** drop-down list, choose **Wireless** to install the LoopUp application on BlackBerry devices over the wireless network.
11. Click **Add to software configuration**.
12. Click **Save all**.

3.8 *Assign Users to Software Configuration*

1. In the BlackBerry® Administration Service, go to the **BlackBerry solution management** menu, expand **User**.
2. Click **Manage users.**
3. Search for any user account.
4. At the bottom of the screen, click **Manage multiple users.**
5. Select the users to which you want you want to deploy the LoopUp software.
6. In the **Add to user configuration** list, click **Add software configuration**.
7. In the **Available software configurations** list, click the **LoopUp** software configuration
8. Click **Add**.
9. Click **Save**.

You can also assign software configurations to a group of users, by going to **Manage Groups** instead of **Manage Users,** choosing an existing group, and then click on **Edit group**. On the **Software configuration** tab, choose the **LoopUp** application in the **Available software configurations** list.

Note: When sending third-party applications to handhelds wirelessly, the wireless download can take up to 4 hours to complete and show up in the user's BlackBerry device.

Recommendation: We recommend that before pushing the application to all users, perform a test on at least one BlackBerry first. This will allow you to verify that all of the security persmissions have been properly set on the BES server. After pushing the application to the BlackBerry, let the BlackBerry remain

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idle for an hour to verify that no security pop-up permissions display. If none have appeared, login to the application and make a test call. Again, verify that no security permissions pop-up. After you have successfully joined and monitored a call, you can deploy the application to all users.

4. Network Access

4.1 Outbound Access

If the BES MDS is configured to use an HTTP Proxy or if the enterprise network restricts outbound traffic in any manner, all network elements should be configured to allow the LoopUp Conference Controller access to the ports defined below.

Port	Number	Domain
HTTPS	**443**	***.LoopUp**
Outbound TCP	**80**	***.LoopUp**
Outbound TCP	**443**	***.LoopUp**
Outbound TCP	**7270**	***.LoopUp**

It is important to ensure that access is allowed via both domain names and the following IP addresses;

209.3.157.96/28;
209.3.157.128/27;
216.111.92.0/24;
64.208.152.192/26

HTTPS Port 443 carries secured information needed for user authentication and authorization.
TCP Port 7270 carries encrypted signaling information for call initiation, call control and real-time in-call status.
TCP Port 443 is reserved for future use

Allowing preferential routing over these ports to traffic destined to the LoopUp subnets will facilitate faster signaling and enhance the responsiveness of the application.

White-list emails coming from the above IP addresses and from @LoopUp.com for delivery of service related emails.

5. Deployment outside of BES

The LoopUp Conference Controller can also be loaded onto a user's device using the device's browser. The user launches the browser on their device, navigates to an URL, and downloads the application from a URL provided by LoopUp. Once downloaded, the application will install automatically.

Note that the capability to control the overall application deployment and software upgrades via the BES is lost when this approach is used.

Any questions, please contact your LoopUp Implementation Consultant.

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